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Methods

Study period: 2.04.2021 - 31.04.2021. A cohort of 57 people was recruited.

Results

12% (7) reported a fatal outcome (seizures in acute stroke period//epilepsy+severe COVID-19//symptomatic epilepsy - metastases in brain + COVID-19)

In 81% (46), COVID-19 was successfully treated. In 7% (4), a transfer to another specialized hospital.

- 1. Patients are unable to report whether they have had previous epilepsy episodes 17.6% (10).
- 2. An epilepsy episode developed for the first time 33.3% (19).
- 3. Epilepsy episodes have been reported before 49.1% (28).

According to the etiology of the epilepsy syndrome (on classification 1):

- The background of acute neurological disorder (cerebral edema: acute stroke period//newly detected large brain mass) – 7%(0-4-0);
- 2. The background of exogenous intoxication by alcohol and psychoactive substances 25.5% (6-4-11);
- 3. Unclear etiology 19.3% (4-7-0);
- 4. Poststroke seizure 12.3% (0-3-4);
- 5. Idiopathic epilepsy 8.8% (0-0-5);
- 6. Symptomatic epilepsy (the background of brain masses) 8.8% (0-0-5);
- 7. In the structure of other diseases 5.3% (0-0-3).

Conclusions

Frequency of admission "COVID-19 + epilepsy syndrome" less in comparison over the same period:

- 1. The etiology of exogenous intoxication still predominates;
- 2. The mortality in the cohort is not higher than in other groups.

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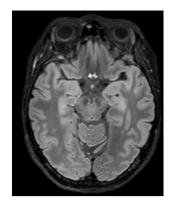
Unusual brain MRI finding in a patient with COVID-induced persistent cacosmia

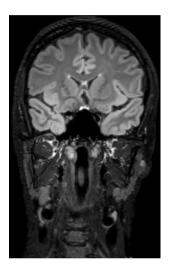
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Background and aims

Olfactory dysfunction is emerging as a key symptom of COVID-19 along with other neurological complications. Herein we describe a case of persistent cacosmia with an unusual finding on brain MRI. Methods

In March 2020, a 50-year-old woman with no relevant medical history developed fever, dry cough, diffuse muscle pain, sudden onset of anosmia and ageusia. She was diagnosed with COVID-19 by positive result on PCR analysis. Her clinical course was uncomplicated. Anosmia and ageusia started improving after two months. However, during the recovery phase she started perceiving distorted and unpleasant smells in response to stimuli (cacosmia) as well as sudden unpleasant smell sensations without any odorant stimuli (phantosmia). These symptoms persisted for 9 months, therefore she was referred to our neurology clinic.





Results

Neurological objective examination was normal. EEG with olfactory stimulation showed a normal pattern. Brain MRI was performed after 10 months from the onset of symptoms. 3D FLAIR images showed an evident cortical hyperintensity in the medial olfactory stria and in the adjoining cortex of the subcallosal gyrus (Figs. 1–2). Conclusions

This report shows an unprecedented signal alteration on MRI in a patient with persistent cacosmia and phantosmia 10 months after SARS-CoV-2 infection, reinforcing the hypothesis of SARS-CoV-2 neurotropic propagation through the olfactory system.

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A post COVID-19 Guillain-Barre syndrome

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Background and aims

Guillain-Barré syndrome consists group of clinical syndromes that manifests as an acute or subacute autoimmune inflammatory polyradiculoneuropathy with resultant weakness and diminished reflexes. It is also part of so-called Yuki syndrome. Its annual